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LEWIS ERNEST SAUNDERS.
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Classes 37.1; 74.5.

Drawing attached.

COMPLETE SPECIFICATION.

"Automatic watering systems for poultry and other live stock."

I, LEWIS ERNEST SAUNDERS, of 113 Gouger Street, Adelaide, South Australia, Engineer, hereby declare this invention, and the manner in which it is to be performed, to be fully described and ascertained in and by the following statement:

In my Patent 26,365/25 I describe a float and valve suitable for feeding water from a tank at a higher level into one at a somewhat lower level and this device can be enlarged on and used with the present invention.

In poultry farms, the water supply is required to be delivered at several points and it is an advantage if this can be done automatically.

By putting in a tank, which can be kept supplied with water from the mains by such means as a ball cock device, at some higher level than the highest point at which the water is required on the poultry farm, and feeding from this tank by means of pipes laid in any convenient position to wherever the water is required, a float and valve of the type described in my Patent 26,365/25 can be successfully used to automatically supply any shape or size of vessel required with a constant level of water and as there will only be a low pressure of water in the pipes, if the valve is made so as to be con-

nected to the pipe by means of a swivel joint, when it is required to shut off the water at any valve, the mere act of turning the valve so that the float is uppermost will do so as the weight of the float will then keep the valve shut, and the drinking vessel can be cleaned out or left empty as required.

It is also often necessary to make arrangement for the level of the drinking vessel to be at different heights so that it can be right on the ground for young chickens and perhaps a foot above the ground for full grown fowls, or any height in between as desired, and I therefore arrange that the pipe on to which the valve is swivelled shall be say, a 15 foot in length and shall be made in the shape of an S or other appropriate form and act also as a swivel joint at the point where it is screwed into the fitting on the main pipe, being locked into this fitting in any position by means of a backnut.

The whole device then becomes universal for supplying water to any sized vessel at the required height.

Of course the valve described in Patent 26,365/25 is not the only type that can be used to advantage with the S shaped pipe made into what could be called a double swivel, even valves that can not be turned up to shut them off, can with advantage be

used with such device so as to raise and lower them in comparison with ground level and so make the height suitable for both small and large birds.

5 In the drawings:

Fig. 1 is an elevation showing an S pipe and float and valve as in my Patent 26,365/25 but made with the addition of a swivel.

- 10 Fig. 2 is a general view of a tank, water pipe leading from same and two fittings showing the S pipe in different positions.

A is the tee, elbow or swivel fitting on the main pipe; B is the S shaped pipe; C, swivel joint to vary height of water vessel above ground level; D, lock nut or similar device to hold S pipe in any position desired; E, swivel valve in open position; F, swivel valve in closed position; G, leather or other washer to make swivel tight against end of pipe C; H, nut of swivel joint; I, lock nut to hold nut of swivel joint firm; J, spindle of valve; L, float; M, water vessel.

Referring to the drawings, A is the end view of a fitting on a pipe line preferably laid along the ground, and connected to a tank or cistern as shown in Fig. 2 through which water can be passed into an S or U shaped pipe B such pipe being screwed into fitting A as shown at C and locked thereby means of backnut D when the other end of pipe B on to which the swivel joint H and backnut I are fixed is any desired height above ground level.

35 Because the valve E is swivelled as at H such valve can be made to stand in a vertical position no matter at what angle as compared with ground level the pipe B is locked into A as shown in two positions in Fig. 2.

40 The valve E spindle J and float K are of approximately the same design as that shown in my Patent Specification 26,365/25, these being used in combination with the flange on the valve casting as shown just 45 behind the leather washer G Fig. 1, such leather or other washer, the loose nut H to hold these two parts against the end of pipe B whilst still leaving the valve free to swivel, and the locknut I provided to keep 50 H from moving by the friction of such swivelling.

This combination makes it possible to turn the valve upside down as shown at F Fig. 1

and use the weight of the float to keep the valve closed. The dish or other vessel can thus be left empty or taken away for cleaning as desired the turning down of the valve again being all that is necessary to supply water to the vessel. 5

In actual use it is found convenient to turn up this valve and so cut off the water fairly frequently and if this were done by rotating the valve in an anti clockwise direction it would tend to loosen the nut H and the purpose of locknut I is to overcome this movement of nut H.

Having now fully described and ascertained my said invention and the manner 15 in which it is to be performed, I declare that what I claim is—

1. In automatic watering systems for poultry and other live stock means such as an S pipe swivelled or screwed at one end 20 into a fitting on the main pipe and locked on to same in any position by means of a back nut or similar device, with a swivel jointed valve at the other end of such S pipe, the nut of such swivel being locked in 25 position by a back nut or similar device to keep it from loosening or tightening when the swivel valve is turned, so that such valve can be set at varying levels above the ground as desired. 30

2. In automatic watering systems for poultry and other live stock a valve operated by a float as shown in the drawings and described in Commonwealth Specification 26,365/25, such valve being swivelled to the 35 water pipe to which it is connected and therefore being capable of standing either in a position with the float down below the valve or with the float up above the valve.

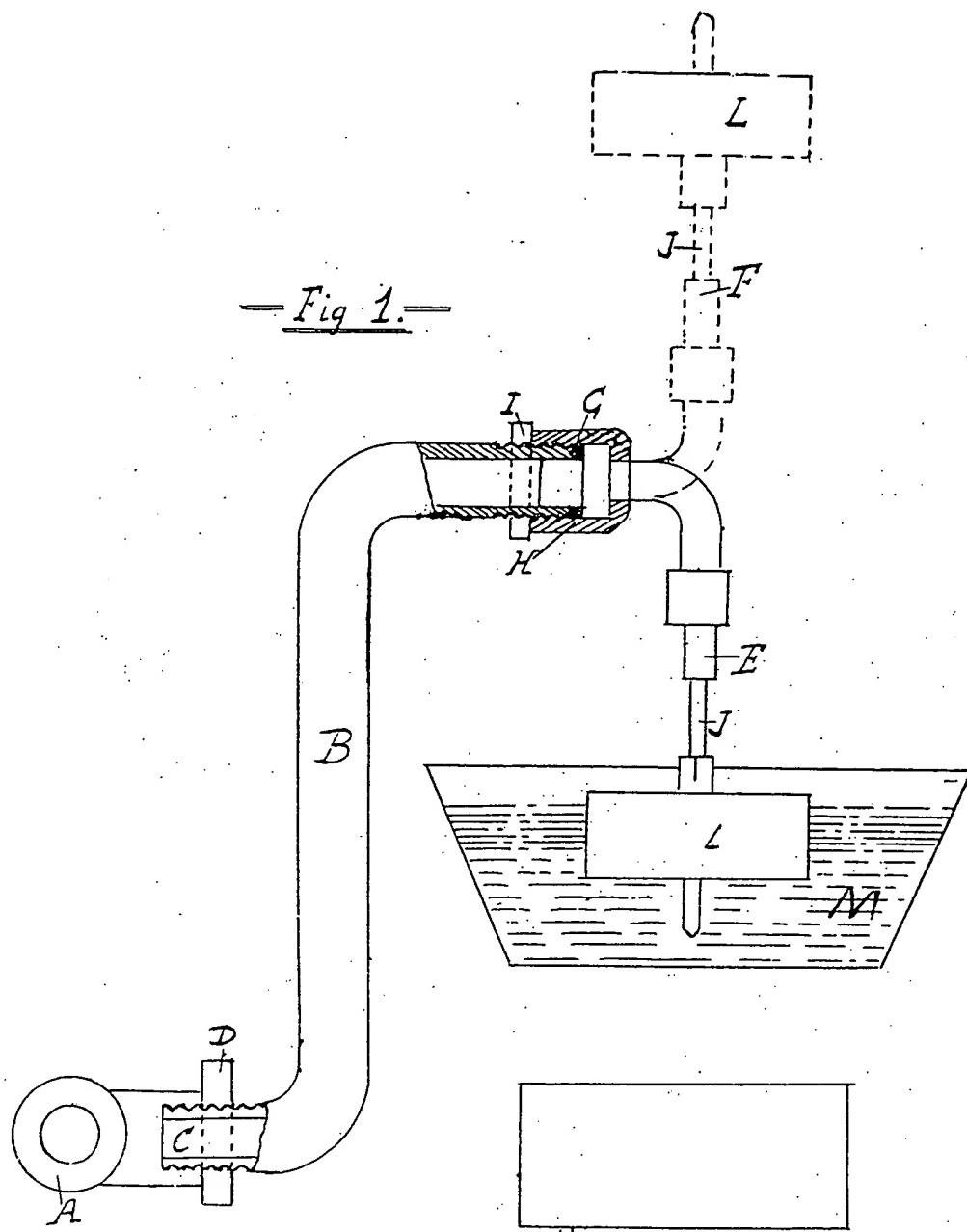
3. In automatic watering systems as 40 claimed in Claim 2 the device of a valve of the type described in Commonwealth Specification 26,365/25, capable of being shut off by the buoyancy of the float when this is below the valve and is raised by the 45 water in a vessel and of being shut off by the weight of the same float when the valve is turned so that the float is above this valve.

Dated this 24th day of May, A.D. 1932.

LEWIS ERNEST SAUNDERS. 50

Witness—Sarah Eugenie Saunders.

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-Fig 1.--Fig 2.-